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(54) Title: SYNTHETIC FATTY ACID DESATURASE GENE FOR EXPRESSION IN PLANTS

(57) Abstract

A synthetic fatty acid desaturase gene for expression in a multicellular plant is provided. The gene comprises a desaturase domain and a cyt b₅ domain, and is customized for expression in a plant cytoplasm. Methods for designing and making a synthetic fatty acid desaturase gene customized for expression in a plant cytoplasm are also provided.